



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,795	03/12/2004	Masaya Fujita	17528	8301
23389 7590 07/09/2008 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530				
EXAMINER SMITH, PHILIP ROBERT				
ART UNIT 3739		PAPER NUMBER		
NOTIFICATION DATE 07/09/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INTPROP@SSMP.COM

### Office Action Summary

**Application No.**

10/799,795

**Applicant(s)**

FUJITA, MASAYA

**Examiner**

PHILIP R. SMITH

**Art Unit**

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13, 14 and 16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11, 13, 14 and 16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Claim Rejections - 35 U.S.C. 112, Paragraph Two**

- [01] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [02] Claims 2-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- [03] Applicant recites "the plurality of devices" in claims 2,5,8 respectively. There is a lack of antecedent basis in claim 1 due to the amendments of 4/3/2008. Claims 3-4,6-7,9-10 depend on rejected claims 2,5,8. Appropriate correction is required.

**Claim Rejections - 35 USC § 103**

- [04] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [05] Claims 1-3, 5-6, 8-9, 11, 13-14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,911,916) in view of Brant (6,278,975).
- [06] With regard to claims 1,13:
- [06a] Wang discloses an endoscope system comprising:
- a voice input unit which inputs voice in a natural phrase ("microphone 34," 3/35);
  - a voice and character converting means ("feature extractor 38," 3/38) which recognizes the voice inputted and converts the inputted voice into character data;
  - a monitoring unit ("decoder 40," 3/40) which monitors comparison data having a previously stored hierarchal structure ("selection command" 3/44) and command character trains ("control command" 3/44) that are hierarchized according to the

comparison data, the comparison data and command character trains being stored in a memory ("pre-saved user-models 41," 3/42) in a system controller ("master controller 12" comprising "voice control interface (VCI) 32," 3/22) for controlling the plurality of devices and the character data that is converted by the voice and character converting means;

- an executing unit (comprising "master controller 12" and "slave controller(s) 14," 4/55-59) which executes an instruction ("control commands," 6/15-23) previously allocated to [a] combination of the command character trains, upon detecting, in the converted character data, the command character train from the plurality of command character trains for a predetermined time interval in accordance with the preset comparison data; and
- comparison data storing means ("language model" 5/27) which hierarchically prestores comparison data ("preferable to store the language models for each device in their respective controller" 5/32-33) to identify the hierarchy in execution of the instruction.

[06b] Wang does not disclose a verification request means for issuing an audible request when the instruction is predetermined to require verification prior to execution.

[06c] Brant discloses a "computer 18" which "identifies a valid command in an audio output signal," "generate[s] a confirmation message before executing the identified command," and "wait for acknowledgment from the operator before executing the command" (7/54-8/2). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the verification request means disclosed by Brant in the invention of Wang. A skilled artisan would be motivated to do so in order to "increase the safety of the

system, particularly in surgery, because the surgeon can cancel a verbal command" (7/65-8/2).

- [07] With regard to claims 2, 5 & 8: The plurality of devices disclosed by Wang comprise an electric cautery device ("electrocautery device 18," 2/51) and a gas insufflator ("insufflator 24," 2/58).
- [08] With regard to claims 3, 6 & 9: The command character trains include character trains which designate a plurality of output formats ("control commands," as noted above) of the plurality of devices.
- [09] With regard to claim 11: Wang discloses that the executing unit executes the instruction ("control commands," as noted above) allocated to the combination of the command character trains and thereafter displays the executed result of the instruction (via "video monitor 86," 8/16).
- [10] With regard to claim 14: as noted above, Wang discloses a display step of displaying an executed result of the instruction after executing the instruction allocated to the combination of the command character trains in the executing step.
- [11] With regard to claim 16: as noted above, Wang discloses an endoscope system comprising one or a plurality of devices, the endoscope system comprising:
- [11a] voice input means which inputs voice in a natural phrase;
- [11b] voice and character converting means which recognizes the voice inputted and converts the inputted voice into character data;
- [11c] a system controller which controls the plurality of devices;
- [11d] monitoring means which monitors comparison data having a previously stored hierarchal structure and command character trains that are hierarchized according to the comparison data, the comparison data and command character trains being stored in a memory in the

system controller and the character data that is converted by the voice and character converting means; and

- [11e] executing means which executes an instruction previously allocated to the combination of the command character trains, upon detecting, in the converted character data, the command character train from the plurality of command character trains for a predetermined time interval in accordance with the preset comparison data.

**Additional Claim Rejections - 35 USC § 103**

- [12] Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Brant and in further view of Tvinneriem (2003/0139789).
- [13] As noted above, Wang in view of Brant discloses "voice control" of "any electrically controlled device utilized in an operating room," including "electrocautery device 18" (2/50-3/30). The voice control disclosed by Wang in view of Brant is broken down into "selection commands," in which a user selects a single device from among a plurality of devices, and "control commands," through which the selected device, for example, an electric cautery device, is controlled.
- [14] Wang in view of Brant does not disclose the specific "control commands" to which the "electrocautery device 18" is responsive. More particularly, Wang in view of Brant does not disclose that the character trains which designate the plurality of output formats of the electric cautery device include an output system designating group [monopolar / bipolar], an incision mode designating group [urology / mix1 / mix2 / pure], an incision output designating group [up / down], a clotting mode designating group [soft / soft A], and a clotting output designating group [up / down].
- [15] Tvinneriem discloses an electric cautery device which is operable in "bipolar and monopolar modes" ([0146]). Tvinneriem additionally discloses that the electric cautery device is operable in "at least

two different modes, an ablation mode and a subablation or thermal heating mode," necessitating a "lower voltage" ([0132]).

- [16] Since one of ordinary skill in the art would be expected to turn to the prior art to "fill in the gaps" when reducing the Wang in view of Brant reference to practice, the ordinarily skill artisan would be thus motivated to use what is known in the art of electric cautery devices. Use of such known features with the electric cautery device of Wang in view of Brant would therefore be obvious and involve no inventive effort.

**Additional Claim Rejections - 35 USC § 103**

- [17] Claims 7,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Brant and in further view of Kraft-Kivikoski (6,402,714) for the reasons set forth in the Office action of 9/5/2006.
- [18] As noted above, Wang in view of Brant discloses "voice control" of "any electrically controlled device utilized in an operating room," including "insufflator 24" (2/50-3/30). The voice control disclosed by Wang in view of Brant is broken down into "selection commands," in which a user selects a single device from among a plurality of devices, and "control commands," through which the selected device, for example, an electric cautery device, is controlled.
- [19] Wang in view of Brant does not disclose the specific "control commands" to which the "insufflator 24" is responsive. More particularly, Wang in view of Brant does not disclose that the character trains which designate the plurality of output formats of the gas insufflator include an air-supply on/off designating group [start / stop], a set pressure designating group [up / down], an air-supply mode designating group [high / middle / low], and a set fluid amount designating group [up / down].

- [20] Kraft-Kivikoski discloses a gas insufflator which can inherently be started and stopped. Kraft-Kivikoski additionally discloses that the gas insufflator is to regulate pressure and supply air ("pressure regulator 18," 7/27-65).
- [21] Since one of ordinary skill in the art would be expected to turn to the prior art to "fill in the gaps" when reducing the Wang in view of Brant reference to practice, the ordinarily skill artisan would be thus motivated to use what is known in the art of gas insufflators. Use of such known features with the gas insufflator of Wang in view of Brant would therefore be obvious and involve no inventive effort.

#### **Response to Arguments**

- [22] Applicant's arguments filed 4/3/2008 have been fully considered but they are not persuasive.
- [23] Applicant contends that "character trains are stored in the VCI, thus an assumption is being made in the present Office Action that the command character trains are stored hierarchically based on speculation and hindsight, rather than any disclosure or suggestion in the cited references". However, the concept of "hierarchical storage" is too broad for Wang to be considered non-anticipatory of such storage.
- [23a] Firstly, Wang discloses use of voice recognition software (3/58) which is inherently "hierarchical", as all software is. For example, Wang discloses that "[t]he models stored in memory 44 constitute a lexicon, which is the entire set of valid pronunciations, or all of the valid words that the master 12 is to recognize" (4/39-41). By separating "valid words" from those which are not valid, Wang establishes a basic hierarchy.
- [23b] With that basic hierarchy of validity or non-validity, those words which are considered valid are further broken down into "a selection command, a control command, or some other



speech to be ignored" (3/43-45). This is another form of "hierarchical storage", in which selection commands delegate slave controllers, which in turn process control commands. This is a clear hierarchy in which "all speech received ... that is not a new selection command is fed to the feature extractor of the appropriately attached slave 14" (4/56-59). Both selection commands and control commands outweigh "other speech to be ignored".

### **Conclusion**

- [24] **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- [25] A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- [26] Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP R. SMITH whose telephone number is (571)272-6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [27] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [28] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained

Art Unit: 3739

from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip R Smith/

Examiner, Art Unit 3739

/Linda C Dvorak/

Supervisory Patent Examiner, Art Unit 3739